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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,246	07/24/2000	Paul Clarke	1131-0444P	6209

7590

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EXAMINER

LOPEZ, CARLOS N

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 04/08/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,246

Applicant(s)

CLARKE ET AL

Examiner

Carlos Lopez

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The amendment filed on 3/20/03 has been entered as Paper No.13.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1, 4-12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Otto (DE 3403281). Otto discloses a filter assembly comprising a cylindrical filtering core (14); a tubular filter sheath (22) surrounding said core and between said core and sheath, passages formed by the corrugated paper layer (20) are spaced circumferentially around said core and extend continuously between the two ends of the filter assembly and tipping paper (24) (Figure 1). The newly added limitation recites that the tubular sheath is made of filtering material for filtering tobacco smoke. It is noted that Applicant's specification in page 6 states, "...the core 10 and sheath 12 comprises filter material. Various kinds of materials such as tow or sheet of cellulose acetate fiber or a paper sheet etc., can be used as the filter material." The translation of DE 3403281 in page 2 and 8 states that the tubular sheath (22) is made of a porous covering paper. Thus meeting applicant's claimed limitation of a tubular sheath made of filtering material.

As for claim 4, Otto discloses means for introducing air into the passages, perforations 26.

As for claims 5 and 8, the core comprises a plurality longitudinal grooves at the outer peripheral surface thereof, defining said passages with the inner peripheral surface of said sheath (22), see grooves provided by the corrugated paper layer (20).

As for claims 6, 9, 11, and 12, the grooves are provided by a tubular corrugated wrapper (20) between the filter core and sheath.

As for claims 7 and 10, the sheath (22) is porous (Page 8, lines 5-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 2-3, 14, 15, and 21 are rejected under 35 U.S.C. 103(a) as obvious over Otto (DE 3403281). Otto is silent disclosing the thickness of the sheath, the ratio of the sheath thickness to the diameter of the core and the total cross-sectional area of the passages. However, the claimed parameters are known variables in the tobacco art that affect the overall ventilation of a filter and/or removal efficiency of the filter. Hence, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify known parameters in the tobacco art to obtain the desired filter ventilation or removal efficiency.

As for claim 21, the number of passages would depend on the desired ventilation.

As for claim 15, a second filter tip 12 as disclosed by Otto, aligned with the filter assembly. While Otto is silent disclosing the airflow resistance of said tip, it is assumed absent any indication that the tip has conventional airflow resistance such as claimed by applicant.

Applicant is referred to Table 1, of Morifuji et al (US 4,488,563) discloses the claimed airflow resistance to show conventional airflow resistance of tobacco.

The indicated allowability of claim 13 is withdrawn in view of the newly discovered reference(s) to Gonterman (US 4,649,943). Rejections based on the newly cited reference(s) follow.

3) Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otto (DE 3403281) in view of Gonterman (US 4,649,943). Otto is silent disclosing openings on the tubular corrugated element (20). However, Gonterman teaches of having perforations of the corrugated wrapper forming the passages on the circumference of the filter core in order to provide an even dilution of the smoke being inhaled by the smoker (Bridging paragraph of Columns 3 and 4). At the time invention was made, it would have been obvious to a person of ordinary skill in the art to have made perforations on Otto's corrugated paper as taught by Gonterman to improve even dilution of the inhaled smoke.

Response to Arguments

Applicant's arguments filed 3/20/03 have been fully considered but they are not persuasive. Applicant argues that the paper wrapping (22) is not made of filter material. Applicant is referred to page 6 of the Applicant's specification stating that a filter material may be a paper sheet. As provided in the enclosed translation in page 2, sheath 22 is a paper thus meetings applicants own definition of filter material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

C.L
March 31, 2003